

What was the purpose of creating these maps? The maps are part of a larger project developed to understand students' mobility. They represent specific areas within Austin Independent School District (AISD) that have high and low levels of student residential mobility, and are used as a visual tool for understanding which areas are most affected by residential mobility.

What question do these maps answer? Student residential mobility is one of the major factors of student campus mobility (Millea, Christian, Stojakovic, & Rao, 2013). The changing of students' residential addresses throughout the school year can be due to families being evicted, seeking less expensive rent, or being in temporary housing. In some instances, change of residence can be precipitated by redevelopment, condominium conversions, or foreclosure. Children who are highly mobile exhibit lower math and reading scores, higher absenteeism, and higher dropout rates than do children who are less mobile (Obradovic et al., 2009). Finally, disruption of friendships and the need to adjust to new environments is likely to affect academic performance and have a detrimental effect on children's mental health (Rhodes, 2005).

What methodology was used? Student residential mobility was defined in this study as the change in a student's residential address as reported to AISD during the 2010–2011 school year. Students' addresses were recorded on an approximately weekly basis, starting on October 1, 2010, and ending on May 31, 2011. Residentially mobile students were defined as students who had more than one residential address recorded during this period. Residentially very mobile students were defined as students who had more than two residential addresses recorded during this period. The greatest number of addresses observed for a single student was eight. The students who did not change residential addresses in this period were defined as residentially stable students. All data were highly dependent on parents' reporting of students' address changes.

What specific data elements were used in the maps? Concentration maps represent neighborhood concentrations of all residentially mobile students enrolled in AISD at any point during the 2010–2011 school year. The colors represent the density of students with the mapped characteristic (e.g., residentially mobile or stable) living in that area. The three highest density deciles are colored red, orange, and yellow. Two types of block group maps are used: density and proportion. The density maps are based on counts of students within block groups who had the mapped characteristic, and the proportion maps are based on the proportion of students who lived in a block group and had the mapped characteristic.

Included Maps

- Page 3. Count of Students, by Block Group
- Page 4. Neighborhood Concentrations of Residentially Stable Students
- Page 5. Neighborhood Concentrations of Residentially Mobile Students
- Page 6. Count of Residentially Stable Students, by Block Group
- Page 7. Count of Residentially Mobile Students, by Block Group
- Page 8. Count of Residentially Very Mobile Students, by Block Group
- Page 9. Student Residential Stability Rate, by Block Group
- Page 10. Student Residential Mobility Rate, by Block Group
- Page 11. Neighborhood Concentrations of Economically Disadvantaged Students

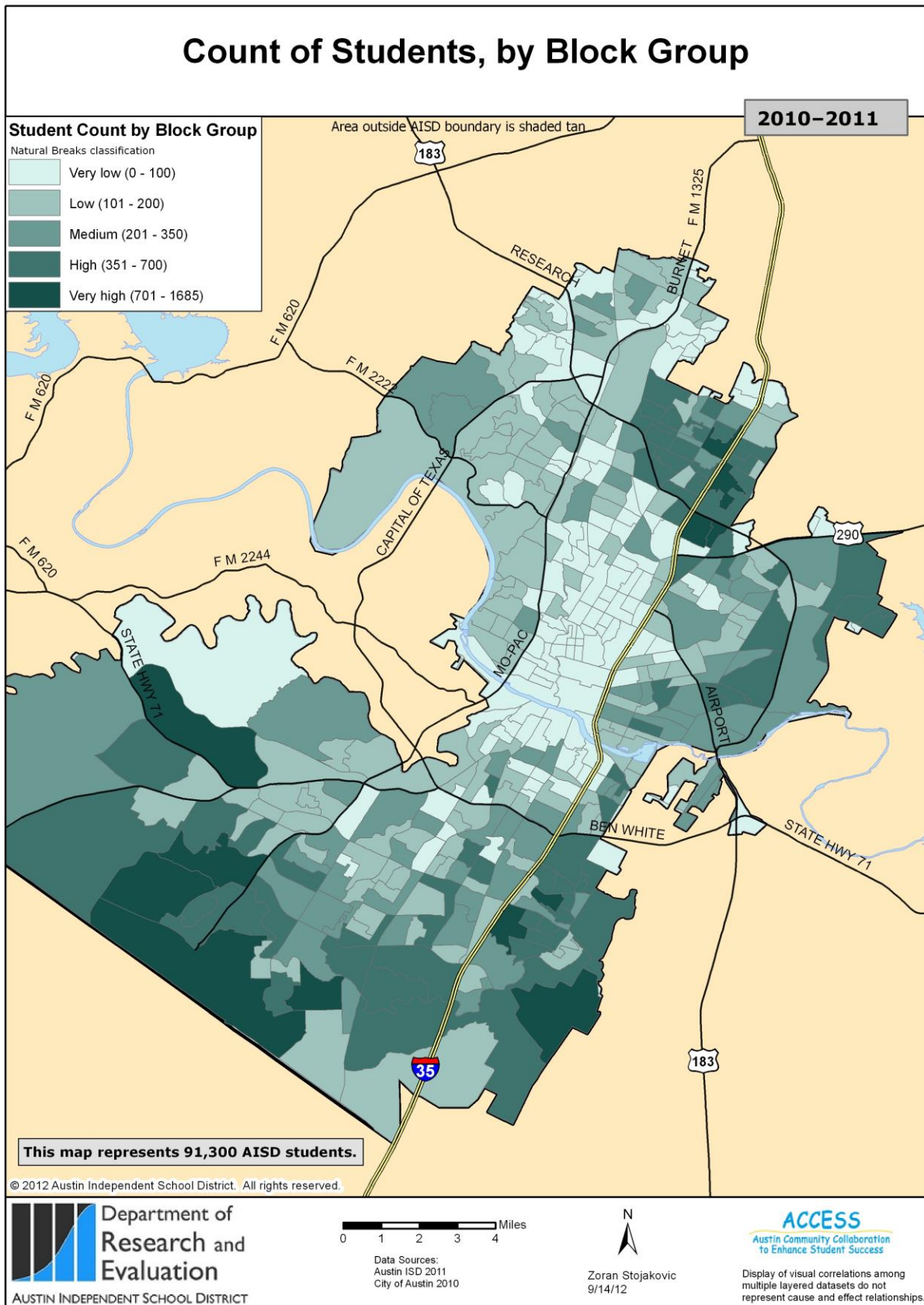
Student Residential Mobility Mapping, 2010-2011

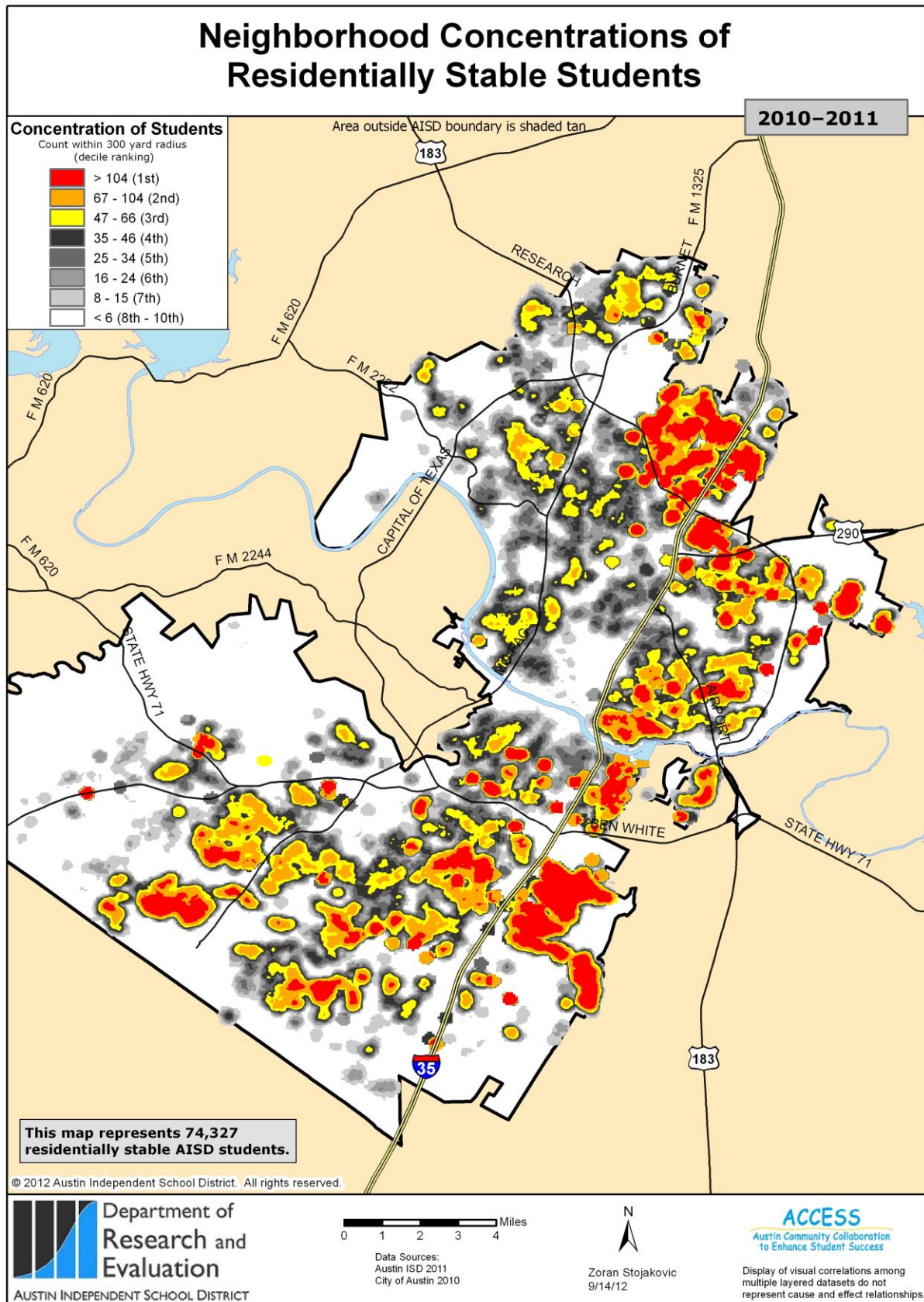
What are the conclusions? The maps in this report enabled us to visualize areas with differential rates and concentrations of mobile students within the district. Because student mobility has been associated with poor academic performance (Mueller & Tighe, 2007), it is important to know where the greatest rate of mobility—and therefore, the greatest potential for improvement—existed in order to develop a community plan to intervene. In addition, these findings enable further research into why certain neighborhoods experienced lower levels of residential mobility than did others. Furthermore, the identification of specific high-turnover residential addresses can contribute to targeted community outreach and assistance. These maps illustrate that mobility is a district-wide concern and that additional support may be needed in some schools and neighborhoods.

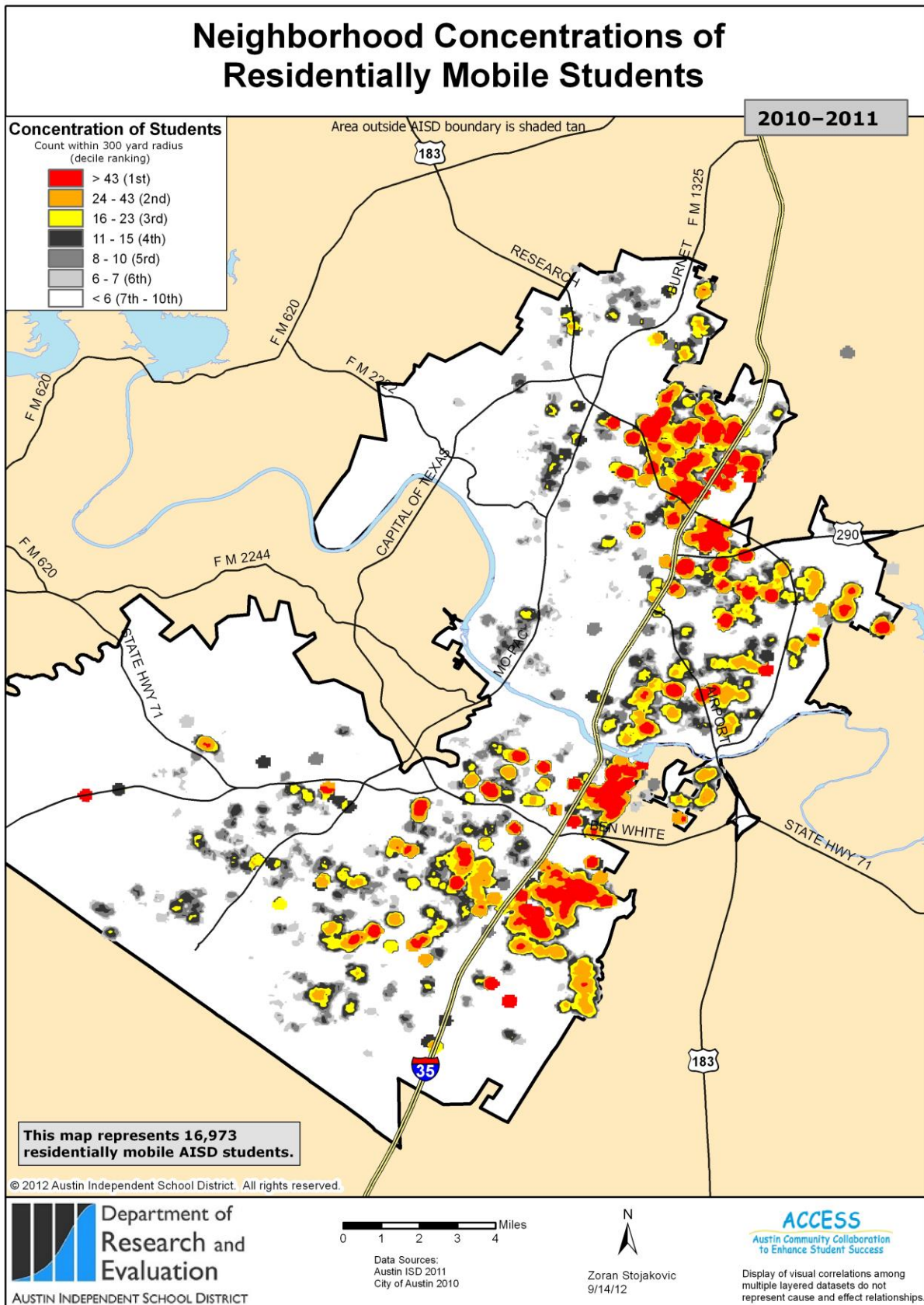
There were 17,075 residentially mobile students (18.6% of the AISD population) during this period. Maps reveal high concentrations of residentially mobile students throughout East Austin, and in particular high concentrations of residentially very mobile students in the Rundberg Road area.

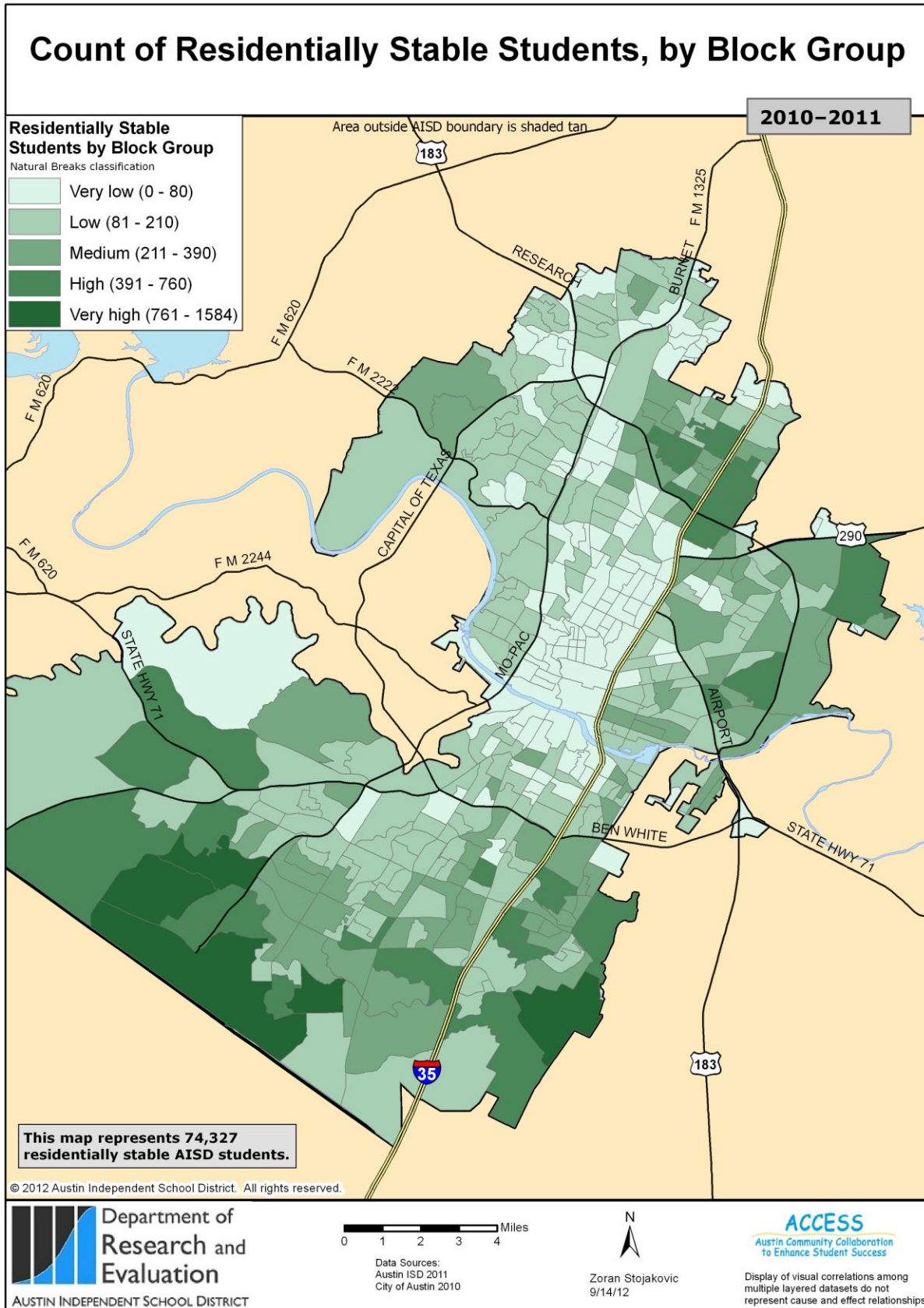
The rate of high absenteeism (more than 10% enrolled days absent) was almost twice as high for residentially mobile students as it was for residentially stable ones. Additionally, economically disadvantaged students were almost three times more likely to also be residentially mobile than were non-economically disadvantaged students.

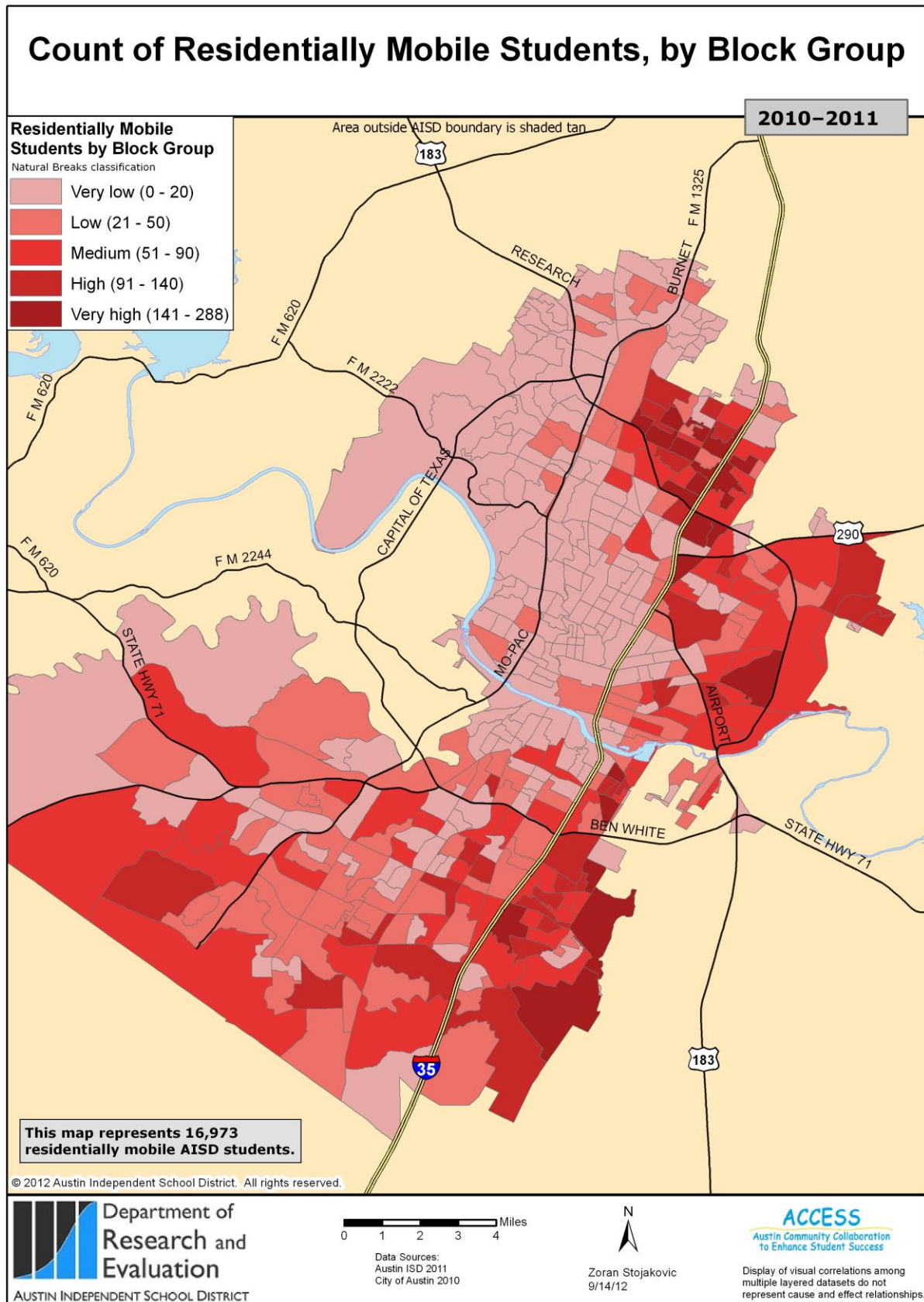
What are future considerations? Further research will study changes in student residential mobility from one school year to the next. With Austin neighborhoods dynamically changing, and the district's student population rapidly growing, continual relatively high student residential mobility is expected. Further questions to explore involve spatial analysis of clusters of mobile students, the socio-demographic characteristics of those students and the neighborhoods in which they live, as well as the academic performance of specific groups of residentially mobile students.

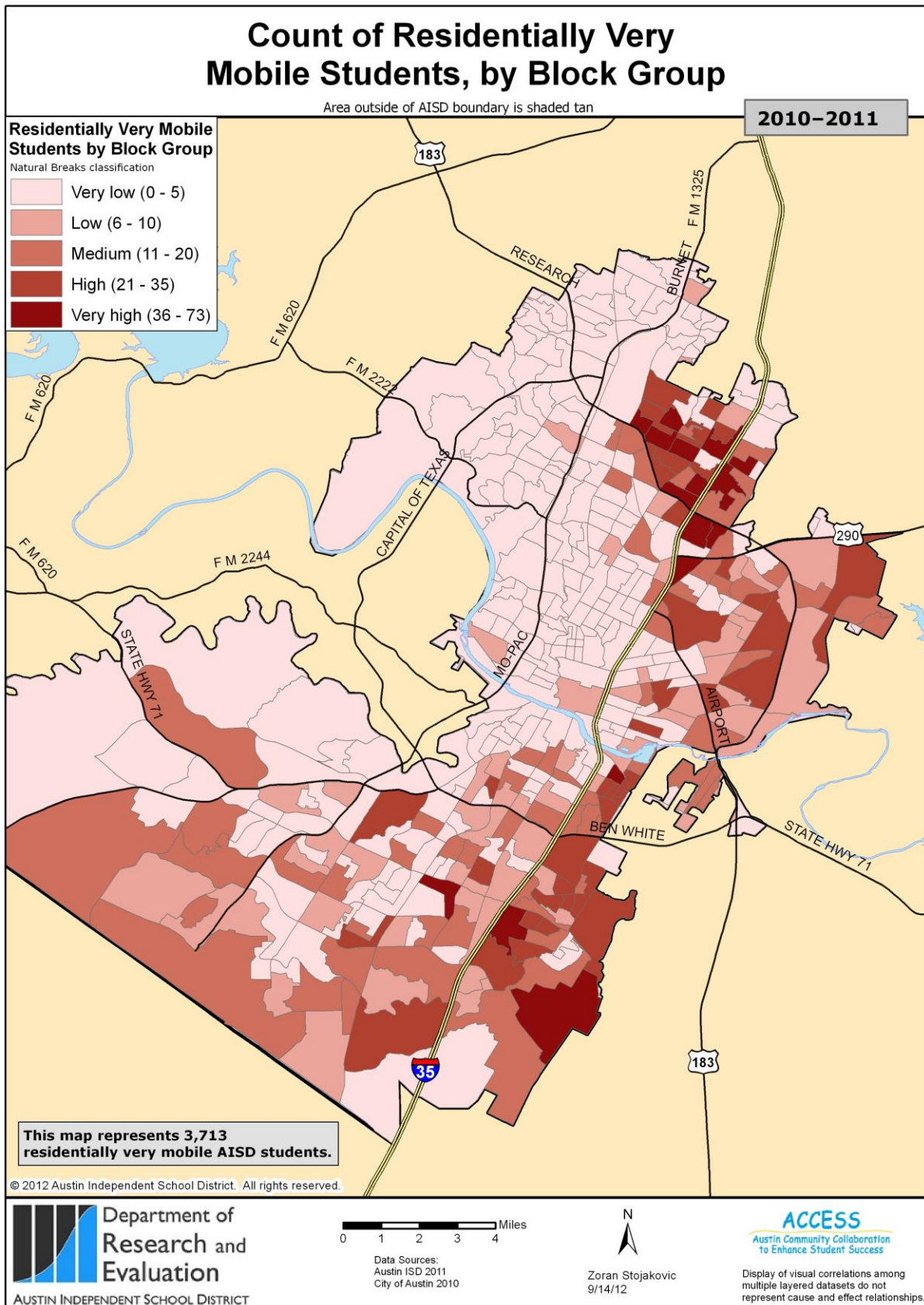


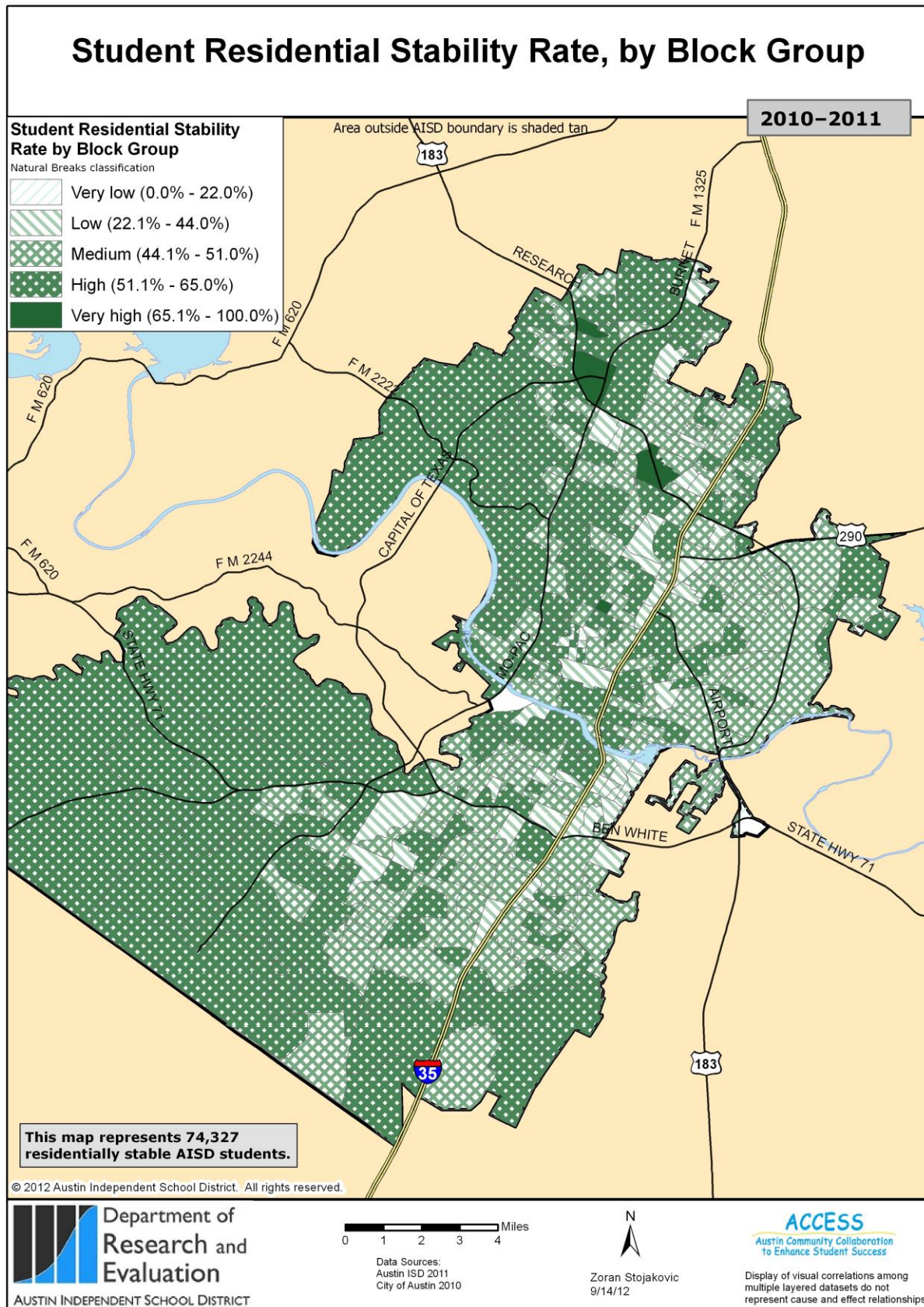


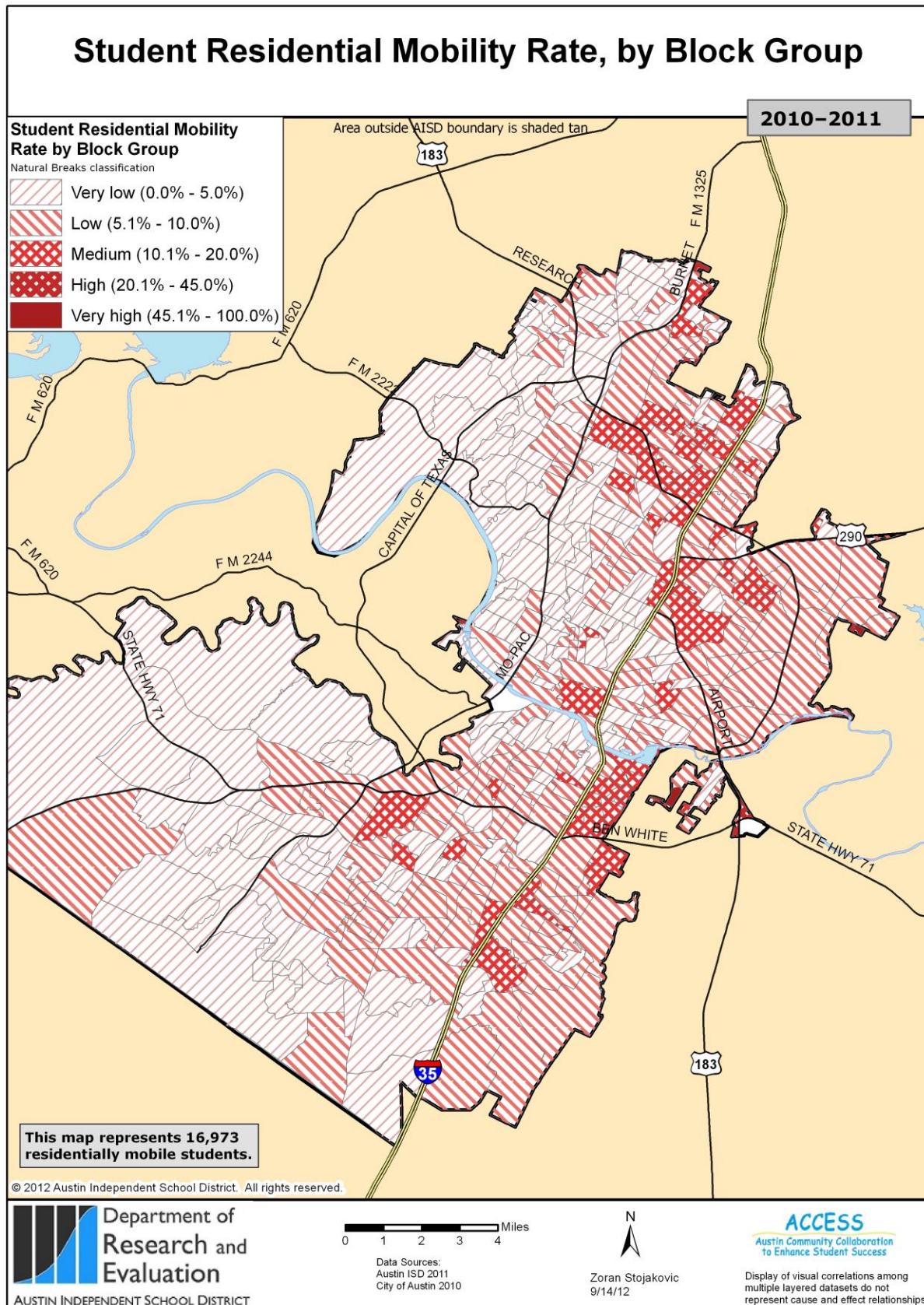


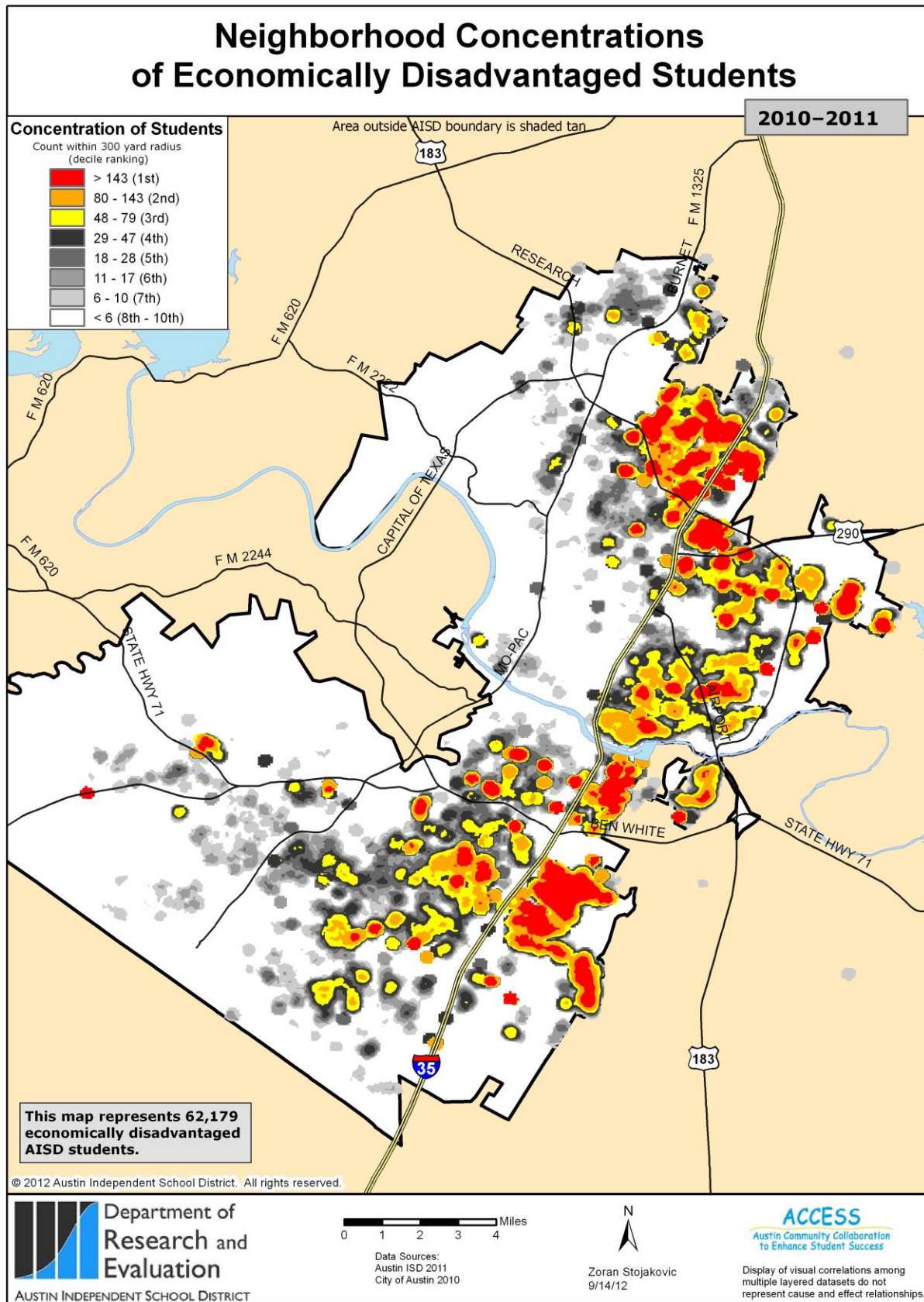












Student Residential Mobility Mapping, 2010-2011

Table 1. 2010–2011 Residentially Mobile Students' Absenteeism Rate

| | Residentially stable | | Residentially mobile | |
|---|----------------------|--------|----------------------|--------|
| | <i>n</i> | % | <i>n</i> | % |
| Low absenteeism (<i>n</i> = 59,776) | 50,678 | 67.9% | 9,098 | 53.3% |
| Moderate absenteeism (<i>n</i> = 18,990) | 14,801 | 19.9% | 4,189 | 24.5% |
| High absenteeism (<i>n</i> = 12,927) | 9,139 | 12.2% | 3,788 | 22.2% |
| Total | 74,618 | 100.0% | 17,075 | 100.0% |

Source. AISD records of student enrollment

Note. The rate of high absenteeism among residentially mobile students (22.2%) was 1.8 times higher than among residentially stable students (12.2%).

Table 2. 2010–2011 Residentially Mobile Students' Economically Disadvantaged Status

| | | Residentially stable (<i>n</i> = 74,618) | Residentially mobile (<i>n</i> = 17,075) | Total |
|---------------------------------------|----------|--|--|--------|
| Economically disadvantaged | <i>n</i> | 47,467 | 14,712 | 62,179 |
| | % | 76.3% | 23.7% | 100.0% |
| Non-economically disadvantaged | <i>n</i> | 27,151 | 2,363 | 29,514 |
| | % | 92.0% | 8.0% | 100.0% |

Source. AISD records of student enrollment

Note. Economically disadvantaged students were 3 times more likely to be residentially mobile (23.7%) than non-economically disadvantaged students (8.0%).

References

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